

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 to 11 (canceled).

Claim 12 (currently amended): A thermal switch according to claim ~~[[11]]~~ 18, wherein the first and ~~the~~ second locations comprise first and second cavities, respectively, in the channel for receiving the droplet of thermally conductive fluid, which substantially fills the cavity in which it is located.

Claim 13 to 17 (canceled).

Claim 18 (currently amended): A thermal switch for switchably providing either a relatively low or relatively high thermal impedance between a heat source side of the thermal switch and a heat sink side of the thermal switch, the thermal switch comprising:

a channel having a first location between the heat source and heat sink sides of the thermal switch and a second location;

a thermally conductive fluid within the channel, the fluid having a surface tension such that it remains substantially as a single droplet and does not flow spontaneously along the channel;

~~A thermal switch according to either claim 11, further comprising~~ a pair of electrodes extending in a plane through the length of the channel such that the droplet of thermally conductive fluid, which is also electrically conducting, provides an electrical path between the electrodes; ~~[[,]]~~ and

a pair of magnetic poles arranged to provide a magnetic field in a direction orthogonal to the plane containing the pair of electrodes and ~~the~~ a longitudinal axis of the channel, whereby provision of electric current through the pair of electrodes and through the droplet of thermally conductive fluid ~~[[,]]~~ causes a force to be exerted on the droplet of thermally conductive fluid to move it along the channel between the first and second locations.

Claim 19 (previously presented): A thermal switch according to claim 18, further comprising a current source coupled between the electrodes at one end of the channel and a voltage meter electrically coupled across the current source, whereby the voltage meter measures a different voltage depending on the location of the droplet of thermally conductive fluid when an electric current is passed through the pair of electrodes.

Claim 20 (canceled).

Claim 21 (new): A thermal switch according to claim 18, further comprising a relief channel coupling the first and the second cavities.